

## 1. INITIATION PHASE

1.1. Overview. The Initiation phase provides the critical first description of the information management problem to be addressed, and secures the resources needed to further examine the problem and potential solutions. The most significant activities of this phase include:

- o Preparing an Initiation Decision Paper which identifies and describes an information management problem, and brings it to the attention of OSWER program management. This activity is performed by one or more program organizations.
- o Confirming the existence of a problem, providing additional guidance where appropriate, and approving or rejecting the commitment of resources to the next phase of the life cycle, Concept. This activity is performed by program management.
- o Preparing an initial Project Management Plan to describe the initial approach for managing and conducting the remainder of the life cycle.

Clearly identifying and describing the information management problem is critical to the successful development of an appropriate solution. How the problem is defined during Initiation will shape the analyses and decisions of the subsequent phases of the life cycle.

Several points are of note for the Initiation phase:

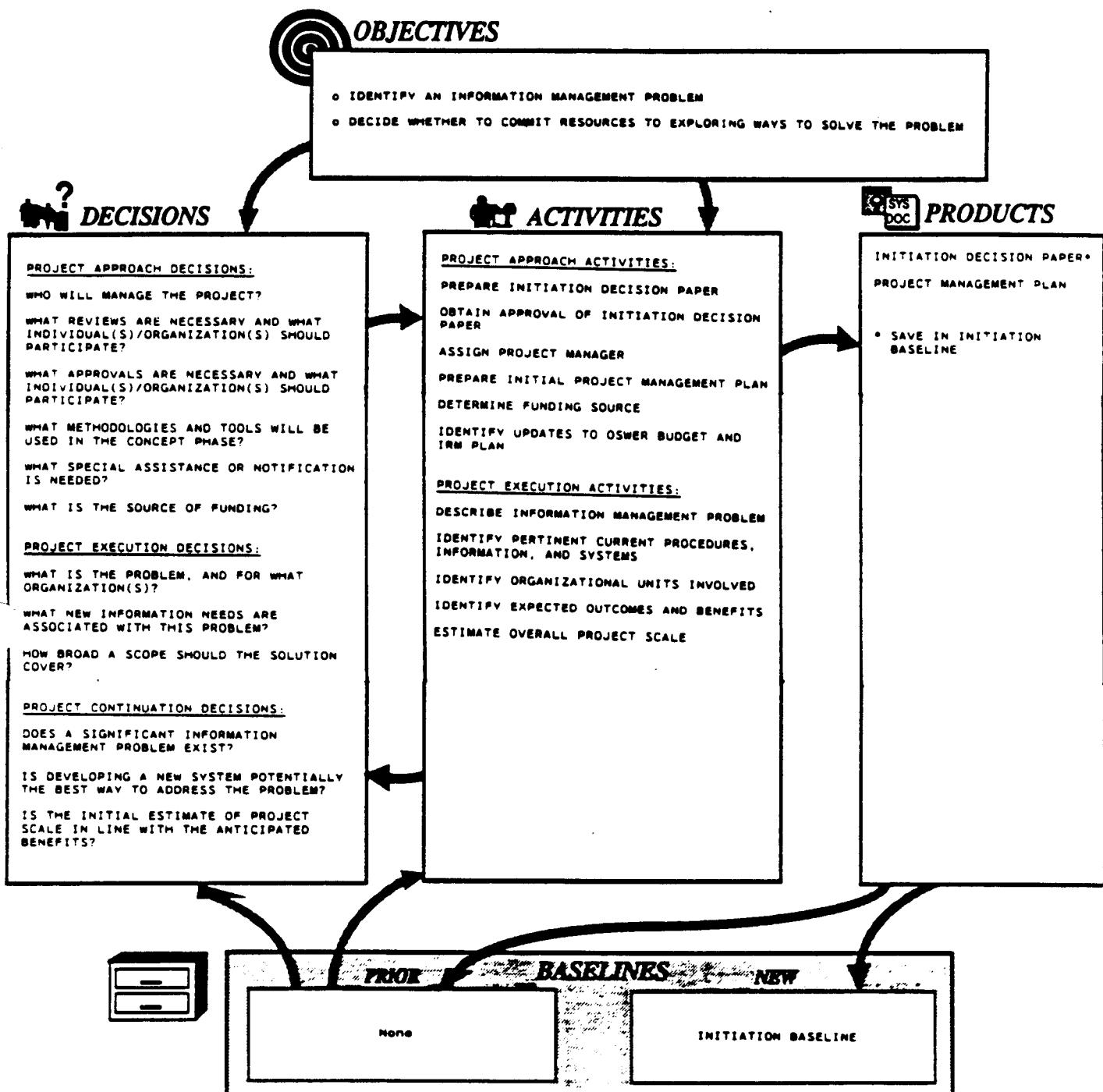
- o At this point, there is no assumption that the solution will necessarily be either a new system or an automated system. A modification to existing manual or automated systems may be the best approach to solve the problem; the determination will be made during the Concept phase.
- o In comparison to later phases of the life cycle, there are relatively few participants in the Initiation phase. The full project team usually is not assembled until the Concept phase.
- o There is a particular focus on defining the information management problem and linking it to specific OSWER missions, as required by the Office of Management and Budget (OMB).
- o The Initiation Baseline is established at the end of this phase. At present, it consists of only the Initiation Decision Paper; it will be expanded during the Concept phase.

1.2. Detailed Description. A detailed description of the Initiation phase is presented in the following exhibits:

- |             |   |
|-------------|---|
| Exhibit 1-1 | Initiation Phase Summary                    |
| Exhibit 1-2 | Initiation Phase Objectives                 |
| Exhibit 1-3 | Initiation Phase Decisions                  |
| Exhibit 1-4 | Initiation Phase Activities                 |
| Exhibit 1-5 | Initiation Phase Roles and Responsibilities |
| Exhibit 1-6 | Product: Initiation Decision Paper          |
| Exhibit 1-7 | Product: Project Management Plan            |

The Initiation phase begins efforts in several areas that are addressed throughout the life cycle: the Project Management Plan, selection of methodologies and tools, benefit-cost analyses, and project reviews and approvals. A life cycle-wide view of these topics is presented in Chapter 10 of this Guidance. This Chapter also addresses other topics of interest throughout the life cycle, including quality assurance, configuration management, and data administration.

## EXHIBIT 1-1: INITIATION PHASE SUMMARY





## EXHIBIT 1-2: INITIATION PHASE OBJECTIVES

OBJECTIVE NAME	OBJECTIVE DESCRIPTION
Identify an information management problem	Describes the problem in clear, technology-independent terms that all affected organizations can agree on. An information management problem can be prompted by factors such as new legislation, changes to regulations, or the growth of a program beyond the support capability of existing systems.
Decide whether to commit resources to exploring ways to solve the problem	Determines whether staff and/or other resources will be devoted to defining and evaluating alternative ways to respond to the identified problem. At this point in the life cycle, the decision to proceed generally applies to only the next phase, Concept. Since the nature, scope and cost of the preferred solution is unknown in this first phase of the life cycle, it would be premature to firmly commit resources beyond the next phase.



## EXHIBIT 1-3: INITIATION PHASE DECISIONS

DECISION NAME	DECISION DESCRIPTION
Who will manage the project?	Determines the organization that will lead the project starting with the Concept phase, and the individual with the skills, experience, and availability to serve as Project Manager.
What reviews are necessary and what organization(s) should participate?	In view of the nature and scope of the problem, determines the key organizations and, potentially, individuals who are to participate in the formal reviews of the project. This decision addresses both programmatic and information management oriented participation, as well as technical interests in the project that may be known at this time.
What approvals are necessary and what organization(s) should participate?	In view of the nature and scope of the problem, determines the key organizations and, potentially, individuals who will be the approval authorities for the project.
What methodologies and tools will be used in the Concept phase?	Determines the methods and tools to be used in conducting the analyses and preparing the products of the Concept phase. May also determine tools to be used in the remainder of the life cycle if appropriate. Considers the lead time and cost of acquiring tools that are not currently available to OSWER.
What special assistance or notification is needed?	Determines whether any particularly unusual programmatic, technical, or information management skills or experience will be needed to conduct the project. Addresses whether notification of any organizations not participating directly in the project may be appropriate, including organizations external to EPA (state organizations, OMB, GAO, others). If the problem is widely shared, data administration should play a strong role.



## EXHIBIT 1-3: INITIATION PHASE DECISIONS (Continued)

DECISION NAME	DECISION DESCRIPTION
What is the source of funding?	<p><u>Project Approach Decisions (Continued):</u></p> <p>Determines the organization that will provide funding for EPA personnel, contractor support, and other resources needed to undertake the Concept phase.</p>
What is the problem, and for what organization(s)?	<p><u>Project Execution Decisions:</u></p> <p>Provides an initial recognition of the problem, establishing the broad objectives of the remainder of the life cycle. This decision addresses characteristics of the problem such as programmatic or other cause of the problem, symptoms of the problem, affected organizations, types of information needed, high level information processing capabilities, an initial perception of the ability of current systems and procedures to solve the problem, and the timeframe(s) within which the problem must be resolved.</p>
What new information needs are associated with the problem?	<p>Provides a context for future life cycle decisions by determining whether a new need exists for information to support a solution. Describes the scope of the need in terms of missions and organizations affected.</p>
How broad a scope should the solution cover?	<p>Provides an overall context within which potential solutions to the problem are defined, and helps ensure that solutions focus on the major priority areas. The scope is determined in terms of the organization(s) (e.g., agency offices, regional organizations, state agencies), the pertinent portions of the missions or programmatic functions of each organization, and the potential relationship of the current problem and efforts to formulate its solution to other previously identified problems and ongoing efforts related to them.</p>



## EXHIBIT 1-3: INITIATION PHASE DECISIONS (Continued)

DECISION NAME	DECISION DESCRIPTION
Does a significant information management problem exist?	<u>Project Continuation Decisions:</u>  Confirms that the defined information management problem exists and is significant enough to warrant further investigation.
Is developing a new system potentially the best way to address the problem?	Confirms that the information management problem is beyond the capabilities of existing systems and that developing a new system is a promising approach. Does not specify whether or not the potential system will be automated.
Is the initial estimate of project scale in line with the anticipated benefits?	Confirms that the projected benefits of a solution to the problem exceed the projected resources required. Makes funding, personnel, and other resources available to continue with the Concept phase.



## EXHIBIT 1-4: INITIATION PHASE ACTIVITIES

ACTIVITY NAME	ACTIVITY DESCRIPTION	PRODUCT CONTAINING RESULTS
<b><u>Project Approach Activities:</u></b>		
Prepare Initiation Decision Paper	Summarize the results of all other project approach and execution activities conducted during the Initiation phase.	Initiation Decision Paper
Obtain approval of Initiation Decision Paper	Obtain program management approval needed to commit further resources to preparing the System Concept.	Initiation Decision Paper
Assign Project Manager	Identify a lead organization for the project, and appoint an individual with the appropriate skills, experience, credibility and availability to lead the project. Clearly define authority and responsibility of the Project Manager.	Project Management Plan
Prepare initial Project Management Plan	Prepare the first sections of the Project Management Plan. This activity includes formulating the project charter; documenting the preliminary life cycle cost estimate, and assignment of Project Manager; developing detailed cost estimate for the Concept phase; performing a threshold analysis of appropriate levels of review and approval; and selecting methodologies and tools to be used in the Concept phase.	Project Management Plan
Determine funding source	Identify the organization that will provide funding of EPA positions, contractor support, and other resources needed to accomplish the Concept phase of the life cycle. At this time, potential funding sources could be identified for subsequent phases as we(	Initiation Decision Paper



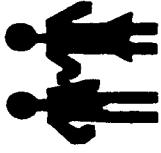
## EXHIBIT 1-4: INITIATION PHASE ACTIVITIES (Continued)

ACTIVITY NAME	ACTIVITY DESCRIPTION	PRODUCT CONTAINING RESULTS
<b>Project Approach Activities (Continued):</b>		
Identify updates to OSWER Budget and IRM Plan	Identify planning and budget information for a new IRM activity, or updated information for any existing activities, that will be the focus of this project and should be submitted in the next semi-annual update of the OSWER IRM Plan.	--
	<b>Project Execution Activities:</b>	
Describe information management problem	Describe the information management problem in programmatic, technology-independent terms. Describe any new information need(s) associated with the problem. Identify the cause(s) and effect(s) of the problem. Validate the description of the problem with all affected organizations.	Initiation Decision Paper
Identify pertinent current procedures, information, and systems	List the appropriate procedures and systems, with brief descriptions.	Initiation Decision Paper
Identify organizational units involved	List the organizational unit(s) at all levels of the Agency, and external organizations, which relate to the problem, and describe the pertinent mission area(s) and programmatic functions of each.	Initiation Decision Paper
Identify expected outcomes and benefits	Predict the anticipated benefits of solving the problem and the likely effects of not taking action to solve the problem.	Initiation Decision Paper



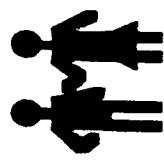
## EXHIBIT 1-4: INITIATION PHASE ACTIVITIES (Continued)

ACTIVITY NAME	ACTIVITY DESCRIPTION	PRODUCT CONTAINING RESULTS
<u>Project Execution Activities (Continued):</u>		
Estimate overall project scale	Perform a preliminary analysis of the potential magnitude of a system solution, noting number of potential users, complexity of processing, size of system, and other particularly unique attributes. Determine whether a system solving the problem will likely be considered mission critical. Prepare an order of magnitude estimate of system life cycle costs. Perform threshold analysis to identify the organizations and individuals that will perform reviews and approvals. Recommend project documentation and reviews commensurate with the scale and importance of the project.	Initiation Decision Paper



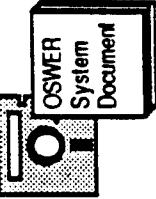
## EXHIBIT 1-5: INITIATION PHASE ROLES AND RESPONSIBILITIES

ACTIVITIES	ROLES AND RESPONSIBILITIES				
	OSWER PROGRAM MANAGEMENT	OSWER STAFF	PROJECT MANAGEMENT	PROJECT STAFF	QUALITY ASSURANCE
PREPARE INITIATION DECISION PAPER	SUPPORT		LEAD/PERFORM		
OBTAIN APPROVAL OF INITIATION DECISION PAPER	APPROVE		LEAD/PERFORM		
ASSIGN PROJECT MANAGER		LEAD/PERFORM	SUPPORT		
PREPARE INITIAL PROJECT MANAGEMENT PLAN			SUPPORT	LEAD/PERFORM	
DETERMINE FUNDING SOURCE	APPROVE		SUPPORT	LEAD/PERFORM	
IDENTIFY UPDATES TO OSWER BUDGET AND IRM PLAN			SUPPORT	LEAD/PERFORM	
DESCRIBE INFORMATION MANAGEMENT PROBLEM	APPROVE		LEAD/PERFORM		
IDENTIFY PERTINENT CURRENT PROCEDURES, INFORMATION, AND SYSTEMS			SUPPORT	LEAD/PERFORM	
IDENTIFY ORGANIZATIONAL UNITS INVOLVED			SUPPORT	LEAD/PERFORM	



## EXHIBIT 1-5: INITIATION PHASE ROLES AND RESPONSIBILITIES (Continued)

ROLES AND RESPONSIBILITIES (Continued)						
<u>ACTIVITIES</u>	<u>OWNER MANAGEMENT</u>	<u>PROGRAM STAFF</u>	<u>OWNER PROGRAM STAFF</u>	<u>PROJECT MANAGEMENT</u>	<u>PROJECT STAFF</u>	<u>QUALITY ASSURANCE</u>
IDENTIFY EXPECTED OUTCOMES AND BENEFITS				SUPPORT	LEAD/ PERFORM	
ESTIMATE OVERALL PROJECT SCALE				SUPPORT	LEAD/ PERFORM	



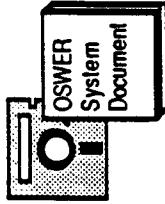
## EXHIBIT 1-6: INITIATION DECISION PAPER

### SUMMARY DESCRIPTION

The Initiation Decision Paper is the key document of the Initiation phase. It describes in technology-independent terms the information management problem, and justifies undertaking the next phase of the life cycle. It has a strong programmatic emphasis, with minimal discussion of the potential solutions to the expressed problem. It includes a preliminary estimate of life-cycle cost, and may include recommendations for documentation and review requirements. No solutions are discussed.

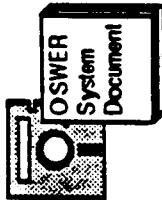
### TOPICS

- o Introduction
  - Purpose of this Initiation Decision Paper (i.e., the decision to be made)
  - Organization submitting the Initiation Decision Paper
  - Mission area(s) addressed
- o Description of information management problem
  - Nature of the problem (e.g., types of information, flows, processing required)
  - Cause (e.g., new legislation, deficiency in existing capabilities, obsolescence)
  - Information need caused by the problem
- o Pertinent current procedures, information, and systems
  - Organizational units affected (e.g., Headquarters offices, regional and state organizations)
  - Timeframe within which a solution is needed (including phasing if need is incremental over time)
  - Short-term and long-term effects of not solving the problem
- o Expected outcomes and benefits (e.g., compliance with regulations, improved program operation, enhanced data collection or sharing, others)
- o Overall project approach



## EXHIBIT 1-6: INITIATION DECISION PAPER (Continued)

- Overall project scale:
  - Whether solution to problem is mission critical
  - Level of complexity or change
  - Preliminary life cycle cost
  - Numbers and locations of expected users
- Results of threshold analysis
  - Recommended documentation/review requirements (optional)
- Source of funding
  - Next steps (relative to System Concept)



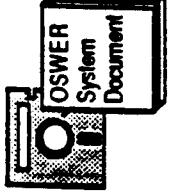
## EXHIBIT 1.7: PROJECT MANAGEMENT PLAN

### SUMMARY DESCRIPTION

A description of the project approach and the means to be used in implementing it. The Project Management Plan evolves throughout the life cycle. This outline presents its contents as of the end of the Initiation phase.

### TOPICS

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|---|
| <ul style="list-style-type: none"><li>o Project charter/objectives<ul style="list-style-type: none"><li>-- Project identification (incorporate Initiation Decision Paper by reference)</li><li>-- Mission and objectives</li><li>-- Scope of information problem/project</li></ul></li><li>o Life cycle adjustment<ul style="list-style-type: none"><li>-- Consolidation of phases and stages, if any</li></ul></li><li>o Project team organization<ul style="list-style-type: none"><li>-- Project management structure<ul style="list-style-type: none"><li>- Project Manager assigned:<br/>individual, current organization, authority</li><li>- Boards, committees or other project management participants</li><li>-- Other organizations to be notified of</li></ul></li><li>o Applicable project approvals<ul style="list-style-type: none"><li>-- Project approval level</li><li>-- Specific approvals to be obtained (by stage)</li><li>-- Approval organization and individuals</li></ul></li></ul></li></ul> |
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## EXHIBIT 1-7: PROJECT MANAGEMENT PLAN (Continued)

- o Benefit-cost analysis
  - Preliminary description of methodology and assumptions
  - Benefits (order of magnitude)
  - Costs (order of magnitude)
- o Methodologies and tools
  - Methodologies (non-automated)
    - For Concept phase
    - Impact on later phases
  - Automated tools/software packages
    - For Concept phase
    - Impact on later phases
    - Support required (if any) for use
- o Tools of tools
  - Workplan for Concept phase
  - Activities and related tasks
    - Products
    - Schedules by task and product
    - Staff and contractor assignments
    - Level of resources for each task and/or product
    - Task relationships/dependencies
    - Schedule of required reviews and approval
    - Performance/progress reporting
    - Notifications